AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently amended) A method of managing processes, the method comprising:

determining a set of available resources within a computer system using at least one of a set of computing devices, each available resource being at least a portion of a component of the computer system currently unallocated to any process executing on the computer system and available for use by any process executing on the computer system;

determining a set of lagging processes within a plurality of processes scheduled for execution on the computer system using at least one of the set of computing devices, each lagging process running behind a target schedule according to a set of execution results of a previously executed process related to the lagging process;

determining an anticipated benefit for the set of available resources for each process in the set of lagging processes using a benefit knowledge database and using at least one of the set of computing devices, the benefit knowledge database including information on a previous execution performance-related measurement of the lagging process for a corresponding previous allocation of resources during a previous execution of the lagging process, the anticipated benefit for each process including an anticipated difference in ~~at least one execution performance-related measurement for the~~ completing execution of the process by the computer system should the set of available resources be allocated as additional resources for the process; and

writing the anticipated benefit for each process to a ~~recordable~~ storage medium.

2. (Original) The method of claim 1, further comprising allocating the set of available resources to at least one of the set of lagging processes based on the anticipated benefit.

3. (Previously presented) The method of claim 2, wherein the at least one of the set of lagging processes comprises a most responsive process for the set of available resources, the most responsive process having the highest anticipated benefit.

4. (Original) The method of claim 1, further comprising executing each process using its allocated resources.

5. (Original) The method of claim 1, further comprising reallocating a resource allocated to an accelerated process to one of the set of lagging processes.

6. (Original) The method of claim 1, further comprising allocating the set of available resources to an accelerated process, wherein the accelerated process comprises a most responsive process for the set of available resources.

7. (Currently amended) A method of managing processes, the method comprising:

determining a set of available resources within a computer system using at least one of a set of computing devices, each available resource being at least a portion of a component of the computer system currently unallocated to any process executing on the computer system and available for use by any process executing on the computer system;

determining an anticipated benefit for the set of available resources for each process scheduled for execution on the computer system based on learned benefit knowledge for each process using at least one of the set of computing devices, the anticipated benefit for each process including an anticipated difference in ~~at least one execution performance-related measurement with respect to the~~ completing execution of the process should the set of available resources be allocated as additional resources for the process, and the learned benefit knowledge including a benefit to at least one execution performance-related measurement with respect to the execution of each process obtained from at least one previous allocation of resources for a previous execution of each process; and

allocating at least some of the set of available resources to a process based on the anticipated benefits using at least one of the set of computing devices.

8. (Previously presented) The method of claim 7, wherein the process comprises a most responsive process for the set of available resources, the most responsive process having the highest anticipated benefit.

9. (Original) The method of claim 7, further comprising determining an anticipated time savings for each process based on the anticipated benefit and a desired execution period.

10. (Original) The method of claim 7, wherein a plurality of the processes comprise sub-processes of a first process, further comprising determining a performance benefit for the first process.

11. (Previously presented) The method of claim 7, further comprising determining a set of lagging processes within a group of processes scheduled for execution on the computer system, each lagging process running behind a target schedule according to a set of execution results of a previously executed process related to the lagging process, wherein the allocating includes allocating at least some of the set of available resources to at least one of the set of lagging processes based on the anticipated benefits for the set of lagging processes.

12. (Canceled)

13. (Original) The method of claim 7, further comprising:

allocating a set of required resources to each process; and

executing each process using the allocated resources.

14. (Previously presented) The method of claim 13, further comprising providing an execution result and a lag time of a first process to a second process, the lag time indicating a difference between an actual execution time and a desired execution period for the first process, wherein the second process requires the first process to complete execution before starting to execute.

15. (Original) The method of claim 7, wherein the allocating step is further based on a minimum amount of the set of available resources that is required for the anticipated benefit.

16. (Currently amended) A computer system comprising:

a set of computing devices including:

a resource system for determining an availability of resources within the computer system, wherein a resource is available when it is not currently allocated to any process executing on the computer system and is available for use by any process executing on the computer system;

a benefit system for determining an anticipated benefit for each process scheduled for execution on the computer system based on a set of available resources and learned benefit knowledge, the anticipated benefit for each process including an anticipated difference in ~~at least one execution performance-related measurement with respect to the~~ completing execution of the process should the set of available resources be allocated as additional resources for the process, and the learned benefit knowledge including a benefit to at least one execution performance-related measurement with respect to the execution of each process obtained from at least one previous allocation of resources for a previous execution of each process; and

an allocation system for allocating resources to processes based on the anticipated benefits.

17. (Currently amended) The system of claim 16, ~~further comprising~~ the set of computing devices further including a status system for determining a status of each process, wherein the allocation system further allocates resources based on the status of each process.

18. (Currently amended) The system of claim 16, ~~further comprising~~ the set of computing devices further including an execution system for executing each process using the allocated resources.

19. (Original) The system of claim 16, wherein the anticipated benefit is based on a set of entries stored in a benefit knowledge database.

20. (Original) The system of claim 19, wherein each entry in the set of entries includes a relative performance change and a corresponding set of additional resources.

21. (Currently amended) A program product stored on a ~~recordable~~ storage medium for managing processes, which when executed comprises:

program code for determining an availability of resources within a computer system, wherein a resource is available when it is not currently allocated to any process executing on the computer system and is available for use by any process executing on the computer system;

program code for determining an anticipated benefit for each process scheduled for execution on the computer system based on a set of available resources and learned benefit knowledge for each process, the anticipated benefit for each process including an anticipated difference in ~~at least one execution performance-related measurement with respect to the~~ completing execution of the process should the set of available resources be allocated as additional resources for the process, and the learned benefit knowledge including a benefit to at least one execution performance-related measurement with respect to the execution of each

process obtained from at least one previous allocation of resources for a previous execution of each process; and

program code for allocating the set of available resources to a process based on the anticipated benefits.

22. (Original) The program product of claim 21, further comprising program code for determining a status of each process, wherein the program code for allocating is further based on the status of each process.

23. (Original) The program product of claim 21, further comprising program code for executing each process using the allocated resources.